DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. D OR LATER
AND FLIGHT MANUAL SUPPLEMENT FMS-D350-689 REV. B OR LATER
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV. 4 OR LATER B
REF. CANADIAN STC: SH02-33
REF. FAA STC: SR01620NY
REF EASA STC: EASA.IM.R.S.01453

PURPOSE

The purpose of this DSI was to add the D350-689-021 Dual High Back Seat Installation, LH, the D350-689-023 Floor Provisons Kit and the D350-689-043 Dual High Back Seat Assembly to IIN-D350-689 Rev. A. The D350-689-021/-023 Kits are compatible with the Energy Attenuating Seat rails in later AS 350/355 model aircraft.

The DSI 9419-011 Kit includes the parts that are required to convert a D350-689-011 installation into a D350-689-021 installation.

At Revision B, the DSI 9419-011 and D350-689-023 kits have been upgraded to include an additional D3811-043 Seat Track Assy for compatibility with the F0425031 Seat Tracks. B

PART LIST

-011	-021	-023	-043	P/N	DESCRIPTION
X				**DSI 9419-011**	**ENERGY ATTENUATING CONVERSION KIT**
	X			**D350-689-021**	**DUAL HIGH BACK SEAT INSTALLATION, LH**
	1	**X**		**D350-689-023**	**ENERGY ATTENUATING FLOOR PROVISIONS KIT**
	1		**X**	**D350-689-043**	**DUAL HIGH BACK SEAT ASSEMBLY**
			2	D3016-041	SEAT FRAME ASSEMBLY
			1	D3017-041	BACK FRAME ASSEMBLY
	1			D3018-1	SEAT CUSHION
	1			D3019-1	BACK CUSHION
			1	D3021-041	TUBE ASSEMBLY
			1	D3022-1	SEAT PAN
			1	D3023-1	BACK PANEL
			3	D3024-1	SPACER
		1		D3025-1	BEAM
		1		D3026-1	CHANNEL
		1		D3027-1	CLIP
		1		D3027-3	CLIP
		1		D3027-5	CLIP
		4		D3027-7	CLIP
			2	D3031-1	LOOP
1		1		D3234-1	DOUBLER
1		1		D3234-3	DOUBLER
2			2	D3808-041	SEAT RAIL ASSEMBLY
4			4	D3809-1	SLIDING BLOCK
1		1		D3811-041	SEAT TRACK ASSEMBLY
1		1		D3811-043	SEAT TRACK ASSEMBLY B

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY:_____
D. SHEPHERD (DE # 02)

DATE: 19.05.28
CERT. NO.: SH02-33
ISSUE NO.: 1

RELEASED

REV.	DESCRIPTION	BY	DATE
B	ADDED D3811-043. REF CAR19-315	RF	19.05.28
A	NEW ISSUE	RF	08.08.19

DESIGN	RF
DRAWN	RF
CHECKED	ML
MFG. APPR.	N/A
APPROVED	ML
DE APPR.	DS
DATE	19.05.28

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. DSI 9419 REV. B
SHEET 1 OF 7

TITLE: ENERGY ATTENUATING PROVISION KIT
SCALE: NTS

-011	-021	-023	-043	P/N	DESCRIPTION	
			3	AN3-12A	BOLT	
14		14		MS20426AD4-5	RIVET	
34		34		MS20470AD4-5	RIVET	
18		18		MS20470AD4-6	RIVET	
		32		MS20470AD5-6	RIVET	
			40	MS20600AD4W2	RIVET	
			6	MS20600AD4W3	RIVET	
12		12	23	MS21042L3	NUT (or MS21042-3)	B
			4	MS24693-S272	SCREW	
8			8	MS24694-S3	SCREW	
12		12		MS24694-S50	SCREW	B
4			4	MS24694-S148	SCREW	
			4	MS27039-1-17	SCREW	
			12	MS27039-1-19	SCREW	
			23	NAS1149D0332J	WASHER (or AN960JD10L)	
12		12		NAS1149D0363J	WASHER (or AN960JD10)	B

PROCEDURE

B 1. Install the under floor structure as outlined in Section 3.10 of IIN-D350-689 Rev. D.

B 2. For aircraft equipped with p/n 159000-26 Seat Tracks, position the D3811-041 Seat Track Assy at LBL 27.33 as shown in Figure 1 to be in-line with the existing seat rails at LBL 8.98 and LBL 19.16.

B 3. For aircraft equipped with p/n F0425031 Seat Tracks, position the D3811-043 Seat Track Assy at LBL 27.33 as shown in Figure 2 to be in-line with the existing seat rails at LBL 8.98 and LBL 19.16.

B 4. Transfer the attachment holes from D3811-041/-043 Seat Track Assy to aircraft floor (9/12 pls) using a ∅0.201 (#7 drill). Deburr holes. Install D3811-041/-043 using (9/12) MS24694-S50 screws, (9/12) NAS1149D0363J washers, and (9/12) MS21042L3 nuts as shown in Figure 1. Torque screws to 20 to 25 in-lbs (2.3 to 2.8 Nm).

5. If converting a -041 Seat Assembly to a -043 Seat Assembly, remove D3028-1 Studs, D3029-1 Springs, and D3030-1 Locks from the D350-689-041 Seat Assembly. Install (2) D3808-041 Seat Rails Assemblies as shown in Figure 1 Detail A using (4) MS24694-S148 Screws. Torque screws to 100 to 140 in-lbs (11.3 to 15.8 Nm). Install D3809-1 Sliding Blocks using (2) MS24694-S3 screws as shown in Figure 1 Detail A. Torque screws to 12 to 15 in-lbs (1.4 to 1.7 Nm).

6. Remove screws from back end of Seat Tracks at LBL 27.33 and LBL 8.98. Slide D350-689-043 Seat Assembly into both seat tracks and lock in desired position using D3810-1 Retractable Spring Plungers. Re-install screws on back of seat tracks per the Aircraft Maintenance Manual.

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DRAWING NO. DSI 9419 REV. B
SHEET 2 OF 7

TITLE ENERGY ATTENUATING PROVISION KIT
SCALE NTS

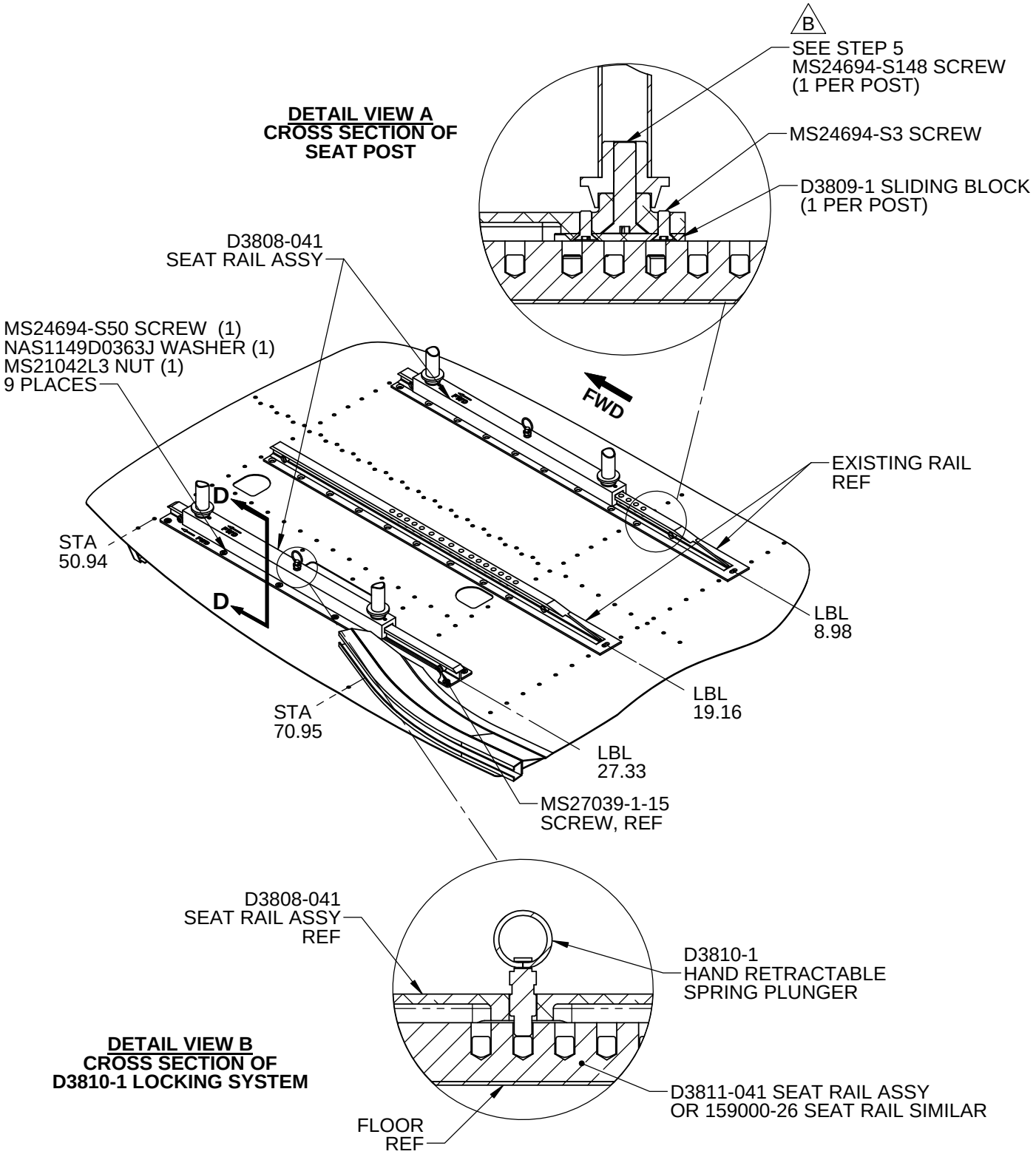

FIGURE 1: D350-689-021 INSTALLATION (FOR 159000-26 SEAT TRACKS)

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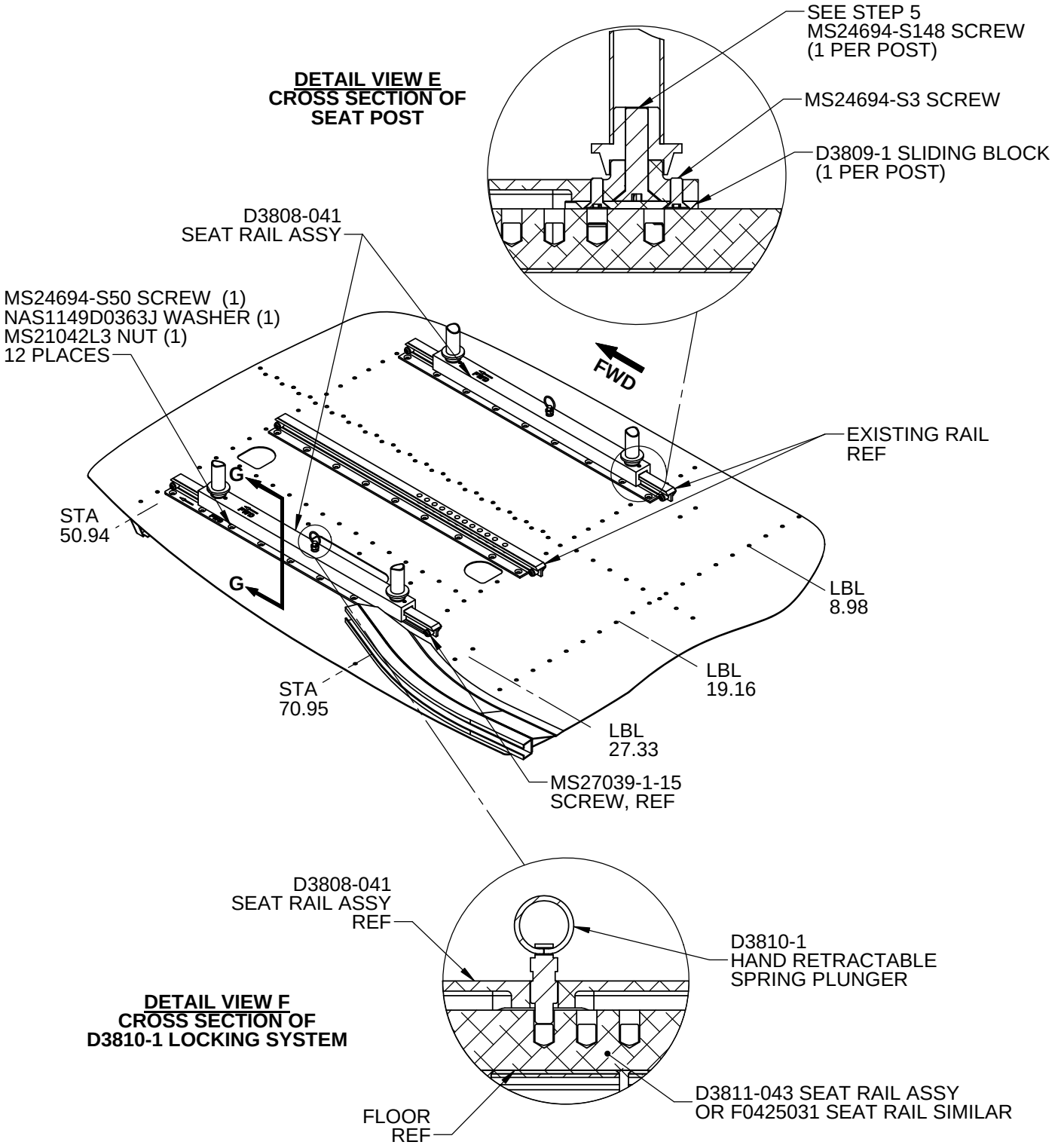

FIGURE 2: D350-689-021 INSTALLATION (FOR F0425031 SEAT TRACKS) B

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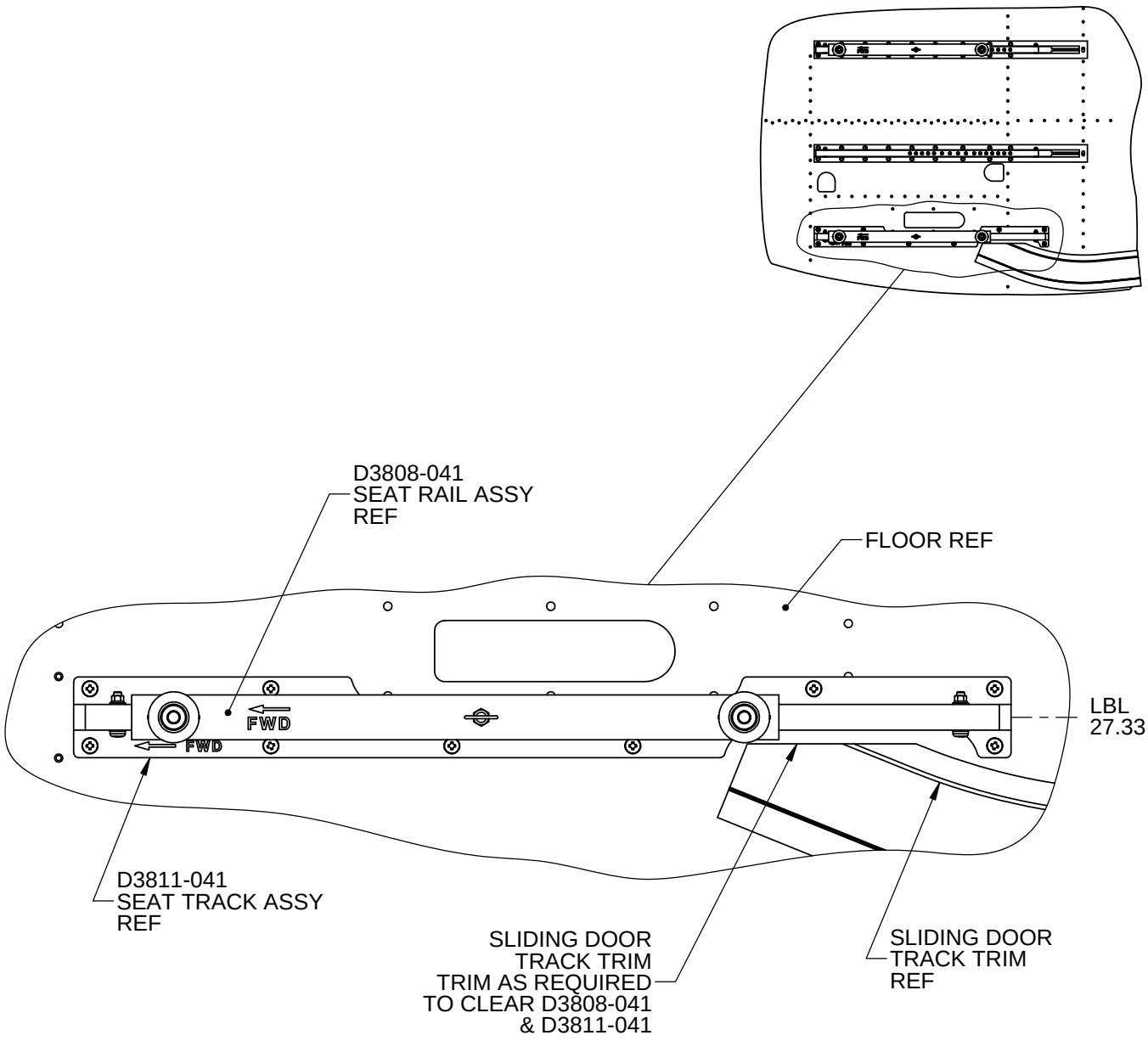

DETAIL VIEW D
SLIDING DOOR TRACK TRIM

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SHEET 5 OF 7

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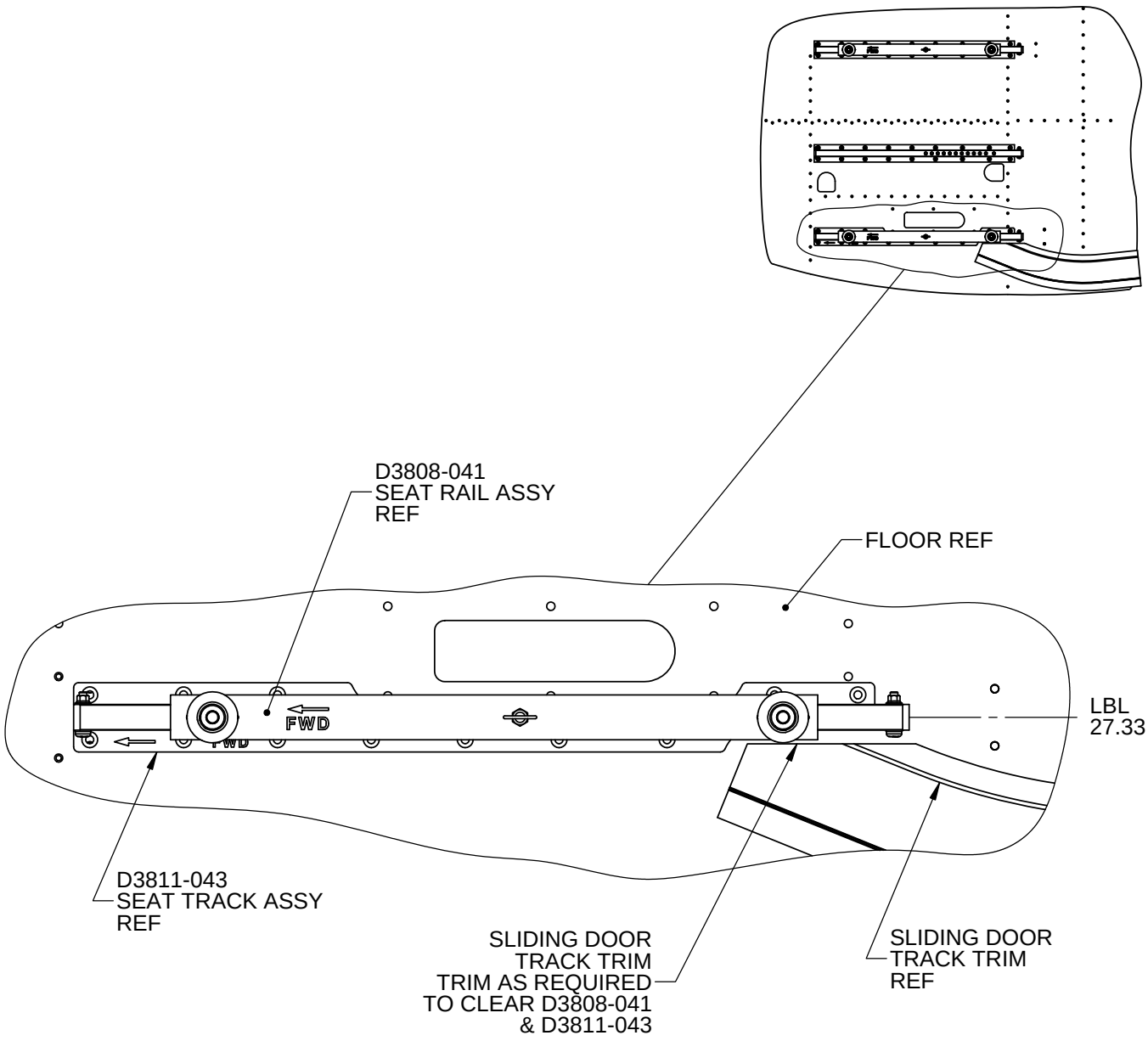
SCALE NTS



DETAIL VIEW G
SLIDING DOOR TRACK TRIM

B

RELEASED

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CHECKED	ML
MFG. APPR.	N/A
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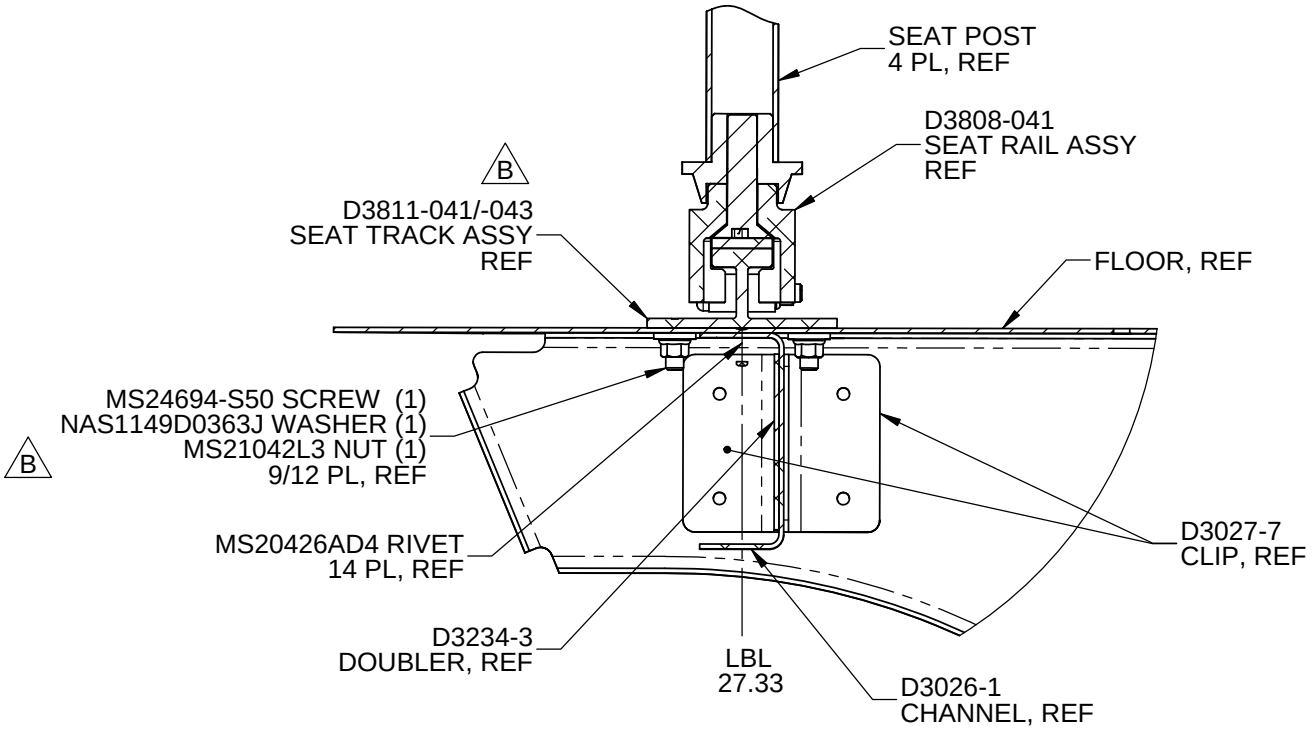
SCALE NTS



CROSS SECTION D-D/G-G

WEIGHT AND BALANCE

The following is the net weight increase associated with the Kits.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
DSI 9419-011 Energy Attenuating Conversion Kit	1.1 lb 0.50 kg	-18.2 in -0.46 m	-20 in-lb -0.2 m-kg	60.7 in 1.54 m	67 in-lb 0.77 m-kg
D350-689-021 Dual High Back Seat Installation, LH Fwd Position	28.6 lb 13.0 kg	-18.2 in -0.46 m	-521 in-lb -6.0 m-kg	60.7 in 1.54 m	1736 in-lb 20.0 m-kg
D350-689-021 Dual High Back Seat Installation, LH Aft Position	28.6 lb 13.0 kg	-18.2 in -0.46 m	-521 in-lb -6.0 m-kg	64.7 in 1.64 m	1850 in-lb 21.3 m-kg
D350-689-023 Energy Attenuating Floor Provisions Kit	2.5 lb 1.1 kg	-18.2 in -0.46 m	-46 in-lb -0.5 m-kg	62.2 in 1.58 m	156 in-lb 1.7 m-kg

REVISED LOADING CHART

With respect to the Loading Chart in FMS-D350-689, when the Dual High Back Seat has been installed in an aircraft with D3811-041 Seat Track per this DSI, the occupants are located at STA 61.02 when the seat is in the Fwd position and at STA 65.13 when the seat is in the Aft position. B

With respect to the Loading Chart in FMS-D350-689, when the Dual High Back Seat has been installed in an aircraft with D3811-043 Seat Track per this DSI, the occupants are located at STA 61.97 when the seat is in the Fwd position and at STA 63.15 when the seat is in the Aft position. B

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SHEET 7 OF 7

TITLE ENERGY ATTENUATING PROVISION KIT
SCALE NTS